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EXAMINER

CHOUDHARY, ANITA

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 02/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/609,046

Applicant(s)

TYRRELL ET AL.

Examiner

Anita Choudhary

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The amendment filed on September 7, 2005 has been entered. Claims 1, 3, 4, 8, 14, and 21 have been amended and are presented for further examination.

Claims 1-29 are presented.

Response to Arguments

Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Information Disclosure Statement

The information disclosure statement (IDS) received on July 22, 2003, January 6, 2004, and September 7, 2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 14-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Cajolet (US Patent 6,192,388).

Cajolet shows a system for distributing rendering tasks to a plurality of different computers assigned to render different portions of the task. Such tasks include rendering image frames of an animation at different computers. Cajolet notes that computer can be coupled in a wide area network in addition of a local area network (col. 6 line 16-17). **Regarding claim 14**, Cajolet shows steps for:

- a local rendering system operable to receive and render a render job having a plurality frames in an animation sequence (col. 5 lines 54- col. 6 line 4); and

- at least one remote rendering system comprising a plurality of remote render servers (fig. 3, col. 6 lines 11-17) and operable to:

- receive from the local rendering system the render job; distribute a first frame of the sequence to a first one of the plurality of remote render servers and a second frame of the sequence to a second one of the plurality of remote render servers the first and second frames being different (col. 6 lines 2-8, 28-45, col. 7 lines 48-52)

- render the first and second frames concurrently at the first and second remote render servers (col. 6 lines 4-8, 40-45, col. 10 lines 18-25); and

- return a result of the render job to the local rendering system (col. 10 lines 34-37).

Regarding claim 15, Cajolet shows:

- a plurality of render servers operable to render a render job having an associated job profile (graphics program, col. 6 lines 34) ;

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a resource database comprising resource information regarding the plurality of render servers (col. 8 lines 43-53); and

a schedule server (88- program dispatcher) coupled to the render server via a communications medium and operable to distribute the render job to one or more of a plurality of render servers based on a comparison of the job profile and the resource information (col. 6 lines 3-8).

Regarding claim 16, Cajolet shows:

a resource database comprising resource information regarding the plurality of render servers (col. 8 lines 43-53); and

a schedule server (88) coupled to the remote render servers via a communications medium and operable distribute the render job to at least the first and second remote render servers based on a comparison of the job profile and the resource information (col. 6 3-8, col. 10 18-25).

Regarding claim 17, Cajolet shows the resource information comprising the type of rendering package associated with each of the plurality of remote render servers (computation characteristics, col. 8 lines 43-53).

Regarding claim 18, Cajolet shows the resource information comprises a processing status for each of the plurality of remote render servers (col. 9 lines 53-56).

Regarding claim 19, Cajolet shows the schedule server is operable to determine whether a particular one of the remote render servers capable of rendering a particular render job (col. 8 lines 38-53).

Regarding claim 20, Cajolet shows the resource database further comprises resource

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information regarding a plurality of render hosts associated with respective ones of the remote render servers (col. 8 lines 43-53).

Regarding claim 21, Cajolet shows:

receiving a render job having a plurality of frames in an animation sequence from a client at a first rendering site (66, 88, col. 5 lines 54- col. 6 line 4) ;

transferring the render job from the first rendering site to a second rendering site (80), the second rendering site located remote from the first rendering site and comprising a plurality of remote render servers (fig. 3, col. 6 lines 9-60);

distributing a first frame of the sequence to a first one of the plurality of remote render servers and a second frame of the sequence to a second one of the plurality of remote render servers; the first and second frames being different (col. 6 lines 2-8);

rendering the first and second frames concurrently at the first and second remote render servers (col. 6 lines 4-8, 40-45, col. 10 lines 18-25).

Regarding claim 22, Cajolet shows transmitting the rendered first and second frames to the client (col. 10 lines 34-40).

Regarding claim 23, Cajolet shows transmitting the rendered first and second frames from the second render site to the first render site (col. 10 lines 34-40).

Regarding claim 24, Cajolet shows storing the rendered first and second frames in a location accessible by the client (col. 10 lines 34-40).

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Regarding claim 25, Cajolet shows the first rendering site comprises: a plurality of render servers operable to render a render job having an associated job profile (fig. 3);

a resource database comprising resource information regarding the plurality of render servers (col. 8 lines 38-53); and

a schedule server coupled the render server via a communications medium and operable to distribute the render job to one or more of a plurality of render servers based on a comparison of the job profile and the resource information (col. 6 lines 46-60).

Regarding claim 26, Cajolet shows a resource database comprising resource information regarding the plurality of render servers (col. 8 lines 38-53); and

a schedule server coupled to the remote render servers via a communications medium and operable distribute the render job to at least the first and second remote render servers based on a comparison of the job profile and the resource information (col. 6 lines 46-60).

Regarding claim 27, Cajolet shows files associated with the render job from the first site to the second site, the associated files being necessary to render the render job (col. 9 lines 1-4).

Regarding claim 28, Cajolet shows the associated files comprise a texture file (col. 5 lines 60-66).

Regarding claim 29, Cajolet shows notifying, by the second rendering site, the first rendering site when the render job has been rendered (col. 10 lines 34-37).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cajolet (US Patent 6,192,388) in view of Smith et al. (US Patent 6,192,407).

Cajolet shows a system for distributing rendering tasks to a plurality of different computers assigned to render different portions of the task. Such tasks include rendering image frames of an animation at different computers. **Regarding claim 1**, Cajolet shows steps for:

receiving from a client a render job having an associated job profile (graphics program) and a plurality of frames in an animation sequence (col. 5 line 54- col. 6 line 4);

distributing via a communications medium (62) a first frame of the animation sequence to a first one of a plurality of render servers (86) and the second frame of the animation sequence to a second one of the plurality of render servers based at least in part on the job profile; the first and second frames being different (col. 6 lines 2-8, 28-45, col. 7 lines 48-52);

rendering the first and second frames concurrently at the first and second render servers (col. 6 lines 4-8, 40-45, col. 10 lines 18-25); and

forwarding the rendered first and second frames to a network storage system (col. 10 lines 34-37);

providing notification to the client that the render job has been completed (col. 10 lines 26-28).

Although Cajolet shows substantial features of the claimed invention, Cajolet does not specifically show *providing notification of a location for client retrieval*. Nonetheless, this

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feature is well known in the art, and would have been an obvious modification to the system disclosed by Cajolet, as evidenced by Smith.

In an analogous art, Smith shows a system for delivering documents to receivers using a private resource locator (see abstract). The Smith patent shows in figure 20, a system for storing, notifying, and retrieving documents. Client recipient (32) is notified with a personal URL (325) that the server is storing documents sent for recipient. Client recipient using the PURL access the document (see figure 1 and 20, col. 15 lines 28-42).

Given this feature, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system shown by Cajolet to employ the features shown by Smith in order to conserve network resources when send in large documents and to allows for document tracking and security (see Smith col. 15 lines 16-27).

Regarding claim 2, Smith shows receiving from a client the render job from a client (320) comprises receiving the render job from a computer remote (315) from the plurality of render servers (300) (fig. 20, col. 15 lines 16-42).

Regarding claim 3, Cajolet shows distributing the first and second frames comprises distributing the first and second frames by a scheduler (88), the scheduler operable determine which of the plurality of render servers are capable of rendering the first and second frames (col. 6 lines 46-55, col. 10 lines 18-25).

Regarding claim 4, Cajolet shows the scheduler is operable to determine which of the plurality of render servers are capable of rendering the first and second frames by accessing a database storing the capabilities each of the plurality of render servers (col. 8 lines 38-53).

Regarding claim 5, Cajolet shows the capabilities database stores the type of rendering package associated with each of the plurality of render servers (computational characteristics, user profile, col. 8 lines 43-53).

Regarding claim 6, Cajolet shows capabilities database stores a processing status for each of the plurality of the render servers (col. 9 lines 53-56).

Regarding claim 7, Cajolet shows further comprising transmitting the rendered first and second frames to the client (col. 10 lines 34-40).

Regarding claim 8, Cajolet shows
a plurality of render servers (fig. 3) operable to render a render job received from a client (82) having an associated job profile (graphics program) and a plurality of frames in an animation sequence;

a resource database (51) comprising resource information regarding the plurality of render servers (col. 8 lines 38-54); and

a schedule server (88) coupled the render server via a communications medium and operable to distribute a first frame of the animation sequence to a first one of a plurality of render servers and a second frame of the animation sequence to a second one of the plurality of render servers based on a comparison of the job profile and the resource information (col. 6 lines 2-8, 28-45, col. 7 lines 48-52).

Although Cajolet shows substantial features of the claimed invention, Cajolet does not specifically show *schedule server operable to notify the client that the render job has been completed*. Nonetheless, this feature is well known in the art, and would have been an obvious modification to the system disclosed by Cajolet, as evidenced by Smith.

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In an analogous art, Smith shows a system for delivering documents from a server to a receiver using a private resource locator (see abstract). The Smith patent shows in figure 20, a system for storing, notifying, and retrieving documents. Client recipient (32) is notified with a personal URL (325) that the remote server (315) is storing a complete document sent for recipient from a sending computer (300) (col. 17 lines 28-42, col. 2 lines 23-36, col. 7 lines 15-18).

Given this feature, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system shown by Cajolet to employ the features shown by Smith in order to conserve network resources and provide security when sending large documents over network links (see Smith col. 15 lines 16-27).

Regarding claim 9, Cajolet shows the resource information comprises the type of rendering package associated with each of the plurality of render servers (computational characteristics, user profile, col. 8 lines 43-53).

Regarding claim 10, Cajolet shows the resource information comprises a processing status for each of the plurality of the render servers (col. 9 lines 53-56).

Regarding claim 11, Cajolet shows schedule server is operable to determine whether a particular one of the render servers is capable of rendering a particular render job (col. 10 lines 18-25).

Regarding claim 12, Cajolet shows resource database further comprises resource information regarding a plurality of render hosts associated with respective ones of the render servers (col. 8 lines 43-53).

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Regarding claim 13, Cajolet shows resource information comprises hardware configuration information regarding the render hosts (col. 8 lines 43-53).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita Choudhary whose telephone number is (703) 305-5268. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anita Choudhary
January 26, 2005



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